



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/054,868	01/25/2002	Thibaut Montanari	ATOCM-245	8547
23599 7590 12/02/2003				
MILLEN, WHITE, ZELANO & BRANIGAN, P.C.				
2200 CLARENDON BLVD.				
SUITE 1400				
ARLINGTON, VA 22201				
			EXAMINER	
			WOODWARD, ANA LUCRECIA	
			ART UNIT	PAPER NUMBER
			1711	

DATE MAILED: 12/02/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/054,868

Applicant(s)

MONTANARI ET AL.

Examiner

Ana L. Woodward

Art Unit

1711

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 1/25/02, 9/11/03, 12/15/03.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-47 is/are pending in the application.
- 4a) Of the above claim(s) 6-8, 17, 24, 25 and 35-39 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5, 9-16, 18-23, 26-34 and 40-47 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. §§ 119 and 120**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 9/11/03. 6) ☐ Other:

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election with traverse of group I comprising composition comprising (A), (B) and (D) as the ultimate composition in Paper filed October 15, 2003 is acknowledged. The traversal is on the ground(s) that the examiner should withdraw the requirement if the groups are not considered to be patentably distinct. This is not found persuasive because applicant have not submitted evidence or identified such evidence now of record showing the species to be obvious variants or clearly admitted on the record that this is the case.

The requirement is still deemed proper and is therefore made FINAL.

2. Claims 6-8, 17, 24, 25 and 35-39 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected group or species, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in Paper filed October 15, 2003.

### ***Claim Rejections - 35 USC § 112***

3. Claims 1-5, 9-16, 18-23 and 26-34 and 40-47 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, no distinction can be seen between the semi-crystalline polyamide (A) which contains partial amorphous character and the amorphous polyamide (B).

In claim 1, component (A) reads on component (D) since the latter encompasses semi-crystalline polyamides.

In claim 1, line 5, "and with" is queried.

In claim 1, the Markush group defining the optional monomers is improper.

In claim 1, no distinction can be seen between the generic "diamine" at line 5 and the "aliphatic diamines" at line 10.

In claim 1, line 11, the term "supple" is indefinite.

In claim 1, line 12, do the "copolyamides" make up part of the antecedently recited "copolymers" defining component (C)?

In claim 1, the "compatibilizer (D)" is indefinite as to scope and meaning.

In claim 1, "the difference is made up with a semi-crystalline polyamide (A)" is awkward and redundant in light of lines 1-3.

In claims 3, 9, 11, 21, 45 and 46, the notation "PA-" is indefinite.

In claims 4 and 45, "equilibrated" is indefinite as to scope and meaning.

In claims 10, 11, 41, and 45-47, "catalyzed" is indefinite as to scope and meaning.

*Claim Rejections - 35 USC § 102/103*

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1, 4, 5, 12-16, 18, 19, 22, 23, 27, 28, 30, 32, 33, 40 and 42-44 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over EP 0070001.

EP '001 discloses polyamide blends containing

- a) about 5-98 percent by weight of at least one semi-crystalline polyamide and
- b) about 95-2 percent by weight of at least one amorphous copolyamide comprising isophthalic acid, terephthalic acid, hexamethylene diamine, cycloaliphatic diamine, and optionally, other monomers. Optionally other additives may also be included.

Attention is directed to page 7, lines 11-16, wherein the reference discloses that semi crystalline polyamides, such as nylon 612, are incompatible with the amorphous copolyamides. From said disclosure, it can be reasonably believed that other semi-crystalline polyamides are compatible with the amorphous copolyamides, such as those used in the examples.

The compositions of examples 1-3 and 5 of the reference meet the requirements of the present claims both in terms of the types of materials added and their contents. This is because it is reasonably believed that the semi crystalline polyamides used in said examples, by being compatible with the amorphous copolyamide, also act as a compatibility agent. Thus, the semi-crystalline polyamides of the reference simultaneously meet applicants' components A) and D). The onus is shifted to applicants to establish that the products of the present claims are not the same as or obvious from those set forth by the reference.

7. Claims 1, 4, 5, 12-16, 18, 19, 22, 23, 27, 30, 32, 33, 40 and 42-44 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over U.S. 5,288,799 (Schmid et al).

Schmid et al disclose thermoplastic molding compositions comprising

A) 25-75 parts of a semi-crystalline polyamide,

B) 75-25 parts of an amorphous copolyamide which results from the condensation of at least one aromatic dicarboxylic acid, at least one cycloaliphatic diamine, at least one dimerized fatty acid and optionally, other dicarboxylic acids, diamines, lactams and aminocarboxylic acids, and

C) 0-30 parts of a compatibility agent. Optionally other additives may also be included.

The exemplified compositions of the reference meet the requirements of the present claims both in terms of the types of materials added and their contents. The onus is shifted to applicants to establish that the products of the present claims are not the same as or obvious from those set forth by the reference.

***Claim Rejections - 35 USC § 103***

8. Claims 2, 10, 20, 21, 26, 28, 29, 31, 34, 41, 45 and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. 5,288,799 (Schmid et al), described hereinabove.

With respect to applicants' claims requiring a polyamide as the compatibilizer (D), it is noted that the reference is generic to any oligomeric or polymeric compound which possesses groups reactive with the terminal groups of the polyamides a) and b), i.e., carboxylic acid groups and amine groups, as the compatibility agent (column 4, lines 34-42). Accordingly, it is

Art Unit: 1711

maintained that said generic disclosure of compatibility agents embraces polyamides (inclusive of catalyzed polyamides) because polyamides typically possess carboxylic acid groups and/or amino groups, which groups would be reactive with the terminal groups of the polyamides a) and b).

As to applicants' requirement of semi-crystalline polyamides (A) comprising monomers containing at least 9 carbon atoms, it is noted that the reference is generic to polyamides resulting from the condensation of aliphatic diamines with up to 12 carbon atoms and dicarboxylic acids also having up to 12 carbon atoms (column 2, lines 54-66). Accordingly, it is maintained that it would have been obvious to the artisan of ordinary skill to have employed semi-crystalline polyamides comprising monomers containing up to 12 carbon atoms with the reasonable expectation of success.

Regarding applicants' requirement that the amorphous polyamide (B) be composed of additional monomers, such as, aminocarboxylic acids, aliphatic diamines and aliphatic dicarboxylic acids, attention is directed to the reference's disclosure of optional monomers (iv), (v) and (vi) at column 3, lines 12-15).

Although the reference does not expressly exemplify blends of either polyamides a) or b), it is maintained that it would have been obvious to one having ordinary skill in the art to have employed a blend of either for their expected additive effect, absent evidence of unusual or unexpected results.

9. Claims 2, 3, 9-11, 20, 21, 26, 29, 31, 34, 41 and 45-47 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP 0070001, described hereinabove.

As to applicants' requirement of semi-crystalline polyamides (A) comprising monomers containing at least 9 carbon atoms, it is noted that the reference is generic to polyamides resulting from the condensation of aliphatic diamines with up to 12 carbon atoms and dicarboxylic acids also having up to 12 carbon atoms and to polyamides derived from lactams, such as, polylauryl lactam (pages 3-4). Accordingly, it is maintained that it would have been obvious to the artisan of ordinary skill to have employed semi-crystalline polyamides comprising monomers containing up to 12 carbon atoms with the reasonable expectation of success.

Regarding applicants' requirement that the amorphous polyamide (B) be composed of additional monomers, such as, aminocarboxylic acids and aliphatic dicarboxylic acids, attention is directed to the reference's disclosure of optional monomers at page 6, lines 10-15.

Although the reference does not expressly exemplify blends of either polyamides a) or b), it is maintained that it would have been obvious to one having ordinary skill in the art to have employed a blend of either for their expected additive effect, absent evidence of unusual or unexpected results.

### ***Conclusion***

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ana L. Woodward whose telephone number is (703) 308-2401. The examiner can normally be reached on Monday-Friday (8:30-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James J. Seidleck can be reached on (703) 308-2462. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9310.

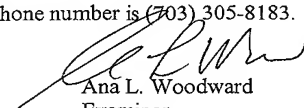


Application/Control Number: 10/054,868

Page 8

Art Unit: 1711

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-8183.



Ana L. Woodward  
Examiner  
Art Unit 1711

AW